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## ABSTRACT

Papers dealing with behavior modification, presented at the annual meeting of the American Association on Mental Deficiency (94th, Washington, D.C., May, 1970), are given in a two volume series. Volume 1 deals with the theoretical papers on behavior modification. Burton Blatt urges much needed reform in the mental institutions of today; ground rules for behavior modification as applied to the educational setting are discussed by Donald MacMillan; Steven Forness talks about behavior modification as an educational and training tool; measurement of adaptive behaviors for programming in residential institutions is explored by Earl Palthazar; and Sherman Yen discusses the mental health technician in the psychological service. (CP)

MENTAL RETARDATION 1970

SELECTED PAPERS FROM THE 94TH ANNUAL MEETING OF THE  
AMERICAN ASSOCIATION ON MENTAL DEFICIENCY

Volume 1: Theoretical Papers

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
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## FORWARD

Ideally, professional meetings are a place where new ideas can be generated, where tentative hypotheses can be formed, and where the latest in research findings may be shared. Usually the material presented at these meetings precedes published articles by an average of a year or more. This makes sharing the contents of these meetings very important. For this reason, as well as others, almost every major professional organization publishes proceedings of its annual convention. The attempt here is to publish major papers from the 94th annual meeting of the American Association on Mental Deficiency. Because this is a single venture and was not supported by the Association, it was not possible to include all or even a majority of the papers. Therefore the arbitrary decision was made to cover comprehensively one major area, behavior modification.

The production of this compendium was no easy task, and required cooperation from the authors, the Superintendent of Orient State Institute, the printing department of Orient State Institute, and the Division of Mental Retardation of the Ohio Department of Mental Hygiene and Correction. For their assistance I am indeed grateful. A special acknowledgment must go to Mrs. Linda Ott, my secretary, who is responsible for the countless hours required to produce this publication.

JMG

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## MAN THROUGH A TURNED LENS

Burton Blatt  
Syracuse University

It has been said that artists distort reality to present reality. Most of us must distort reality to preserve it. For things aren't what they are, but how they appear to a man. He views his world in his own way, and each perception is a special perception. If, in this paper, you believe my lens has taken a wrong turn, please attempt to adjust your focus, not my vision. In this special way permit me to behave as though things are how I see them.

My thesis is that society will not eradicate institutional back wards, will not guarantee human rights, and will not eliminate hunger by tearing down back wards or "guaranteeing" human rights or feeding hungry people. Mankind must change if we are to reduce inhumanity, if humanity is to survive.

You and I have experienced too much. We observe and record the devastation and consequences of mankind's mad excesses and, in bewilderment, we grope to comprehend this sickness infecting normal people. In despair, we must conclude that, while humanity is imperiled, life continues to flourish heedlessly. In anger, we realize that as man perseveres, his soul dies. In frustration, we observe that, during our evolution, we have camouflaged the body but accomplished little on behalf of the spirit. We have smoothed the skin but not the conscience, brought dignity to the carriage but scant any to the carrier.

In humility, and with knowledge that I am no better qualified as accuser than those to whom I speak, I seek redress for certain acts

committed by and against mankind.

I am a collector of injustices. Is there a profession as vilified, held more in contempt? I appear as a modern day Pharisee, and enjoy my role less than those upon whom I intrude. I cringe with embarrassment, presuming to tell you what you must become. Yet I abandon caution, not to save my brothers, but to preserve myself. And, to preserve myself, I ask you to please hear this review of a small segment of human history.

Have you been to Dachau? Can you add all of the Dachaus to all of the Siberias? Is there a man willing to catalogue our own Southern history, life in demented mental hospitals, Vietnam, and the world of man-made sub-humans some call state institutions? In his own manner, each man thinks about evil. And, in his curious mind, there are times and situations where he is comforted by its presence. But, is there a man who will tolerate a flood that is endless and fathomless and senseless?

In his own manner, each man dreams about clean, happy, laughing people. And, watching a lively girl stroll the avenue on a clear morning, a day that is perfect for mankind, is there a soul who can think about beaten and made-ugly humanity? Yet I am driven to remind you that the moon does have its dark side; the human spirit does entice the inhuman act; man does not always please. Without credentials for these responsibilities, I seek to preserve the precarious thread between each of us and the humanness that we are fast losing. Without credentials, I make demands---yet prefer to follow. I am forced to enjoin my betters, for you have rejected the wisdom of your betters. While the time is long past when mankind ceased his climb upward, there is yet a chance to revive that destined goal and divert ourselves from this faithless

journey to nowhere. And, today at least, I believe our one chance lies not in extolling the glories and virtues of that dreamed of ascendancy, but in describing, dissecting, and comprehending our debasements and agonies. We may save ourselves, not with promises of a new good life to goad us, but with plain accounts of the real-unreal world we have fashioned for ourselves and, now, must either change or eternally wallow in its slime.

What must we change? Where shall we do battle? Who are the people responsible for Dachau and Song My, for Hitler and Stalin, for some now nameless forgotten German officer and for our own, for the Cancer Ward and the State School, for bloated starving Biafran children, and too many of our children, for wars and killings and hunger and slavery and avarice and dehumanization and inhumanity? Who are the people responsible? You are the only person and I am the only person responsible and accountable. If you do not change all is lost and, if I do not change, nothing will change. If I blame an evil world, a stupid system, blind leaders, or man's obvious imperfections, I may be right. But if it means I do not have to change, I contribute to the evil.

You and I are all that is needed to change the world. Our necessary confrontation is not social. It is personal. The battle is not against society but with oneself. It is not political, but psychological, not within the group, but in the mind, not to safeguard one's civilization, but oneself, not legal, but moral. The final confrontation will not be among groups of men such as those seated at the United Nations, but within the depths and images and mazes that comprise and consume the substance of each man. The race to eternity will be between a civilization moving toward its infamy and each man weighing his belief in its glory or his worship of its obscenity. In whatever

way the race concludes--win or lose, the survival of humanity or the triumph of savagery---individual man will determine the outcome.

My thesis is, and must be, expressed with repeated use of such terms as "I" and "my". This can not be an objective discourse concerning ambiguous Man. It must be the subjective revelation of someone who is forced to flee the safety and comfort of dispassionate exchange. Both this report and whatever you and I do in reaction to it must be personal---in the profound sense---not social.

During my travels through Germany, I had often wondered,  
 "Was he guilty? What she involved?"  
 Having never encountered one who was guilty or involved,  
 I realized that I had been asking the wrong questions.  
 Can a man be guilty just because he is not involved?

Where were those 50 million uninvolved Germans?  
 Where are the 150 million (175 million?) unbigoted Americans?  
 Were the good Germans innocent?  
 Is liberal America racist?

They were guilty.  
 We are racists,  
     not because we abuse and destroy, but because  
     our voices are silent.  
 The silent Americans are guilty!

The racist tells the coon joke and the kike joke and  
 The racist listens without rancor.  
 The racist does not rent to blacks and  
 The racist does not protest.

Every German who lived unharmed was guilty.  
 Every American---white and black---who is comfortable in his society  
     is racist.  
 All who have experienced or know of Purgatory, asylums, and  
     totalization---  
     and are untroubled---  
 Dehumanize their brothers.

To observe sorrow untouched is to cause it to continue.

I ask you to change humanity by changing yourself, to solve the  
 riddle "I" before you attempt to solve the human puzzle, to commit  
 yourself before you commit mankind. I ask you to think of yourself,



not society, and how you must evolve, not what civilization must endure. And for he who concludes that I ask the chicken to change the egg when I say that the individual must change himself, first, and then society, does he still doubt that man one day will change his genes?

It is clear that, ultimately, each man must account for his personal behavior and the behavior of those he influences. And, it is clear that each point has its counterpoint. For each deed there is another deed or a misdeed. And, all these fulfill a grand design for man to alter and improve. As man comprehends his mission and destiny, the design for each of us will reveal as much as he wishes. Man is able to judge and determine his future, and the condition in which he will achieve it. Man is capable of understanding how the human world is the complex parts, the sum, and the substance of infinite points and counterpoints.

As each point has its counterpoint, each paradox can unfold understanding. To study human behavior is to study apparent paradoxes ---as it is to seek truth. If, to know all is to accept all, to know people is to bring one closer to understanding and accepting them--- and their weaknesses as well as that which makes them unique and marvelous. In the profound sense, there is no paradox to:

the thief who is honest,  
the harlot who is virtuous,  
the noble man who is ignoble,  
the wait for Godot that is the wait for God.

And, knowing that to be comfortable in a mad universe one must operate in a state of discomfort.

In the profound sense, it may not be paradoxical that, as we grope toward an understanding of dehumanization, we may be led to accept the puzzle of humanity. In the process, we may learn that, while living is a paradox, life is a simple and self-revealing truth.

Since time immemorial, man has heard---and done little---about starving and tortured children. However, even the cleverest among us is unable to conceal or justify mankind's historical denial of fundamental human rights to some among his brothers. There is a difference between truth and fantasy, and he who doesn't appreciate this difference can be dangerous. Such a person finds his truth as it conveniences him and as it fits his behavior. To that man, truth is operational belief, a kind of functionalism; if I do it or believe it, by my definition of the infinite it is the correct thing to do or to believe. Even such a person is unable to conceal or justify our sorrowful heritage.

Despite my belief that we, in America, no more---or less---than other nations sanction human indignities, what I have to report draws its reference from the historical antecedents and the contemporary character of life in America. For, we must admit that the zeitgeist of our present society is menacing:

Fat, indolent, oppressive  
America, America  
God shed thee of your waste  
Plunder and spoil  
You destroy  
And what which you destroy  
Destroys  
America that you conserve  
I destroy

Buffy, ingenious, submissive  
America, America  
Your crown has thorns  
With paradoxes that have paradoxes  
Our days are better  
As they grow worse  
We become more affluent  
As we sink  
Lover

Our obese and hungry together average where we should be  
 Not where we were or what we are  
 All of our wars have been righteous and we fight mental illness  
 As we continue to kill and be killed  
 In foreign lands and at home  
 We are confused and inept with the Blacks  
 The Reds, The Yellow (not Yellows?)  
 No not Yellow, never Yellows  
 Always the Yellow Menace, the Yellow Horde

And, in our crises with the Blacks  
 And the Yellow Horde  
 We lose what we know of ourselves  
 And what man can make of himself  
 While bright young Ph.D's and other D's engage themselves  
 And prove to us  
 That ants are elephants  
 That the world is a marvel  
 That society brings me happiness

That I cannot change the world  
 That I am not responsible

Our pioneering forefathers carved out a great and mighty civilization from an indomitable wilderness that required billions of years to form and but a mere hundred or so to conquer. And, the price of that wondrous achievement was destroyed Indian civilizations, exploited and brutalized Oriental field workers, victimized Italian railroad laborers, hollow-eyed children working in Manhattan sweat shops and, probably, the longest and most continuous and most systematic dehumanization program known to mankind---American slavery. Through some quirk, we are as careful to record for posterity our sicknesses as well as our spiritual victories. There has never been a scarcity of injustice collectors and, in view of our behavior, through the years they should have been kept quite busy. It would benefit each of us to review recorded descriptions of the auction block. Read about men, fighting and crying, begging not to be separated from wives and children; a girl, no more than fifteen, her dress torn away to show that she has no whiplash scars, to demonstrate she isn't a "mean nigger".

Slaves branded on the thigh, head, or breasts, or back---chained together and marched from one state to another---and those too old or too tired or not caring to live anymore, left by the wayside to die. Generations of blacks, engulfed and mired in a culture so inhumane that---only now---can some appreciate the myth of their inferiority and natural subservience. And, although there will always be the rebel leader and heroic freedom fighter, America's humscape will long bear the scars of a system that taught human beings to believe they were not human while they were taught to pray to, and believe in, a merciful God. From the beginning, our history is not unspoiled.

In New York, recently, the papers reported the arrest of a man and his wife for murdering the woman's daughter. The child was starved and beaten and, eventually, thrown into a river, anchored to forty-five pounds of rocks. However, it is not about child-beaters, insane killers, pathological rapists, and humanity gone berserk that I address myself before this group. Horrifying and painful as those situations are, for thousands and thousands of years civilization has upheld the illegality of such behavior and, thus, society has recognized and accepted its responsibility to exact an "eye for an eye" or to impose whatever punishment or retribution it finds necessary to protect itself. Rather, I ask you here to consider our legal or quasi-legal sanctioned policies and practices that lead to and encourage the denial of human rights to human beings. I ask you to consider the public's will not the criminal's code, society's ethics not it's prohibitions.

I ask you to reflect upon the consequences of our unique American slave system, injustice in our schools, and the evil perpetrated within our mental hospitals and state schools for the mentally retarded. I ask you to view contemporary American life and your personal

activities and convictions with the same diligence and remorselessness we, in America, judged Hitler's policies in the Warsaw ghetto, Stalin's at Lubyanka, and Mao's, Castro's and Mussolini's. As---to our misfortune---the American list is not unlike most other nations', this review will focus particularly on children and their treatment in institutions.

As I exhort you to change and as I remind myself that reform will not come unless I change, I am compelled again to seek a form, more personal than prose, to communicate beliefs concerning man and his interrelatedness.

For mankind must believe that:

Each man's life means everything,  
Or it means nothing.  
He is the only man,  
Or no man exists.  
Each life and each death  
Is a profound event,  
Or no life---not a single life ever---  
Has of any consequence.  
Everything matters or nothing has mattered.

But to account for oneself as one accounts for his brother, to speak of personal anguish so as to deal better with the anguish of others, is a severe test. To do this and to be optimistic in the face of reality---in spite of reality---is the test of poets.

For, who can describe beauty in institutions  
Who can pay honest tributes to their buccolic scenes  
    of lush fields and clear streams  
Who can so reduce the terror inside  
    to permit its physical appreciation outside  
Who can view the scatological in relation to its  
    tautological---not its villainy

Who will attempt to discuss the humanitarian ethos  
    in terms of:  
    asylums  
    custody  
    totalization

Who is so capable that he may bring dignity to such words as:

inmate  
 patient  
 material  
 Who is so sensitive, and insensitive, as to drive from  
 his mind:  
 the back ward  
 the day room  
 the non-school school

Is there a poet---has there ever been one---so brave or  
 wise that he dared:  
 to squeeze out the truth until it appeared as a lie  
 to be so objective as to be beyond reality  
 to stare down evil and find goodness

Are there men---is there a human being---who can  
 detach themselves from passion and prejudice  
 Who can write a true account of life in the institution  
 who can write about:  
 the good as well as the evil  
 the beauty with the horror  
 the profound asylum and the vivid confinement

Is there one person not of the establishment---  
 and not of the reformists---whose axes are ground and whose  
 battles are won:  
 who can take distance and yet have compassion  
 who is neither frightened of evil nor awed by goodness  
 who can forgive everything and nothing

Is there a poet with words so true, with a mind so clear  
 and soul so deep that:  
 he comprehends the incomprehensibility of asylums  
 his language permits new understandings  
 we accept his words as deeds

If there is such a poet  
 he would appear

Some day, a man will be known  
 Who will teach us of life, of beauty, and evil  
 Who will help us unfold the meanings of things  
 And will cause us to learn that there is a design

He will teach us that:  
 in spite of the back wards  
 in spite of the inmates  
 in spite of the evil  
 The design for each of us holds nothing but good

In Paris, on December 10, 1948, the United Nations General As-  
 sembly adopted a Universal Declaration of Human Rights. Its preamble  
 spoke of dignity and equality and freedom, once revered concepts that

---in recent years---have fallen upon evil days. I am compelled today, more than two decades after adoption of the Universal Declaration, to review some of the Articles---thereby assessing the state of humanity as I have experienced it and as I judge it to be.

If "All human beings are born free and equal in dignity and rights," then why have I seen, in dormitories for the severely mentally retarded, solitary confinement cells that are continuously filled and with waiting lists for their use?

If "Everyone has the right to life, liberty and security of person," then why have I seen a female resident at the state school for the mentally retarded who has been in a solitary cell for five years, never leaving---not for food or toileting or sleep?

If "No one shall be held in slavery or servitude," then why have I seen men who have been held in state school custody for twenty or thirty years, neither having been granted a review of their cases nor genuine consideration of the possibility that they may be capable of discharge and community placement?

If "No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment," then why have I seen two young women in one solitary cell at the state school, lying nude in a corner, their feces smeared on the walls, ceiling, and floor---two bodies huddled in the darkness, without understanding the wrongs they have committed or those committed against them?

If "Everyone has the right to recognition everywhere as a person before the law," then why have I seen another young woman, in solitary confinement, day after day and year after year, nude and assaultive, incontinent and non-verbal---except for one day each month when her parents call for her, and when she is washed and dressed and, then,

taken home or for a ride in the country---except for one day each month when her clothes remain on her, when she communicates, when she is a human being?

If "No one shall be subjected to arbitrary arrest, detention or exile," then why have I seen men and women---residents of state schools for half a century---never knowing why they were placed originally, no longer caring to experience the outside world, and with no possibility that anyone outside is either interested in them or knows that they exist as human beings?

If "Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him," then why have I seen a boy at a state school in continuous seclusion twenty-four hours a day, described by the dormitory physician as a "monster"?

If "No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation," then why have I seen incoming mail to state school residents, and their outgoing mail, read and censored by institutional supervisors?

If "Everyone has the right to freedom of movement and residence within the borders of each state. (If) Everyone has the right to leave any country, including his own, and to return to his country," then why have I seen human beings who have never---in ten or twenty or thirty or seventy years---left the one hundred or two hundred or a thousand acres of the state school---they who were delivered there at birth, only whose souls will leave?



If "Men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and to found a family," then why have I seen the mentally retarded, the epileptic, and others denied such rights, by state statutes; why have I seen young women sterilized as a condition for their release from the state school?

If "Everyone has the right to own property alone as well as in association with others. (If) No one shall be arbitrarily deprived of his property," then why have I seen residents of the state school deprived of their personal possessions and their entitlements under public assistance?

If "Everyone has the right to freedom of thought, conscience and religion," then why have I seen some residents at the state school required to attend church services and other residents prohibited from such attendance?

If "Everyone has the right to freedom of opinion and expression," then why have I seen a child berated by his state school teacher because of the opinions he expressed and why did I hear her tell him how ungrateful, how wicked he was, in light of the bountiful state, that had given this unwanted child everything and expected only loyalty and gratitude in return?

If "Everyone, as a member of society, has the right to social security," then why have I seen more securing than security, more solitary than social, more indignity than dignity, more enchainment than freedom?

If "Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment," then why have I seen residents of state schools in custody

long beyond that time when they merited community placement, in custody because they were performing essential and unpaid work at the institution?

If "Everyone has the right to education," then why have I seen children at state schools for the mentally retarded permanently denied any semblance of education, treatment, or training?

If "Nothing in this Declaration may be interpreted as implying for any state, group or person any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein," then why have I seen human beings who have been given nothing, who have nothing and who, tomorrow, will have less?

Why have I seen a state school superintendent who did not call for a postmortem, an inquiry, or even a staff conference to determine the possibility of negligence or other unusual circumstances surrounding the death of a severely retarded child who choked when an attendant fed her a whole hard-boiled egg?

Why have I seen a state school director of nursing leave suddenly for a three day vacation, without assigning additional staff or someone to succeed him in his absence, during the midst of a hepatitis epidemic where, in one building alone, twenty-seven of seventy-one patients were diagnosed as having this dreaded disease.

Why have I seen a severely retarded ambulatory resident, stabbed in the testicles by an unknown assailant while he slept, who almost died because the night attendant bandaged him as best she could, with no one doing anything else for the wound until ten hours later?

Why have I seen children at the state school go to bed each night wearing dungarees instead of pajamas, on mattresses without sheets, without pillows, and not one child "owning" even a single article of

clothing?

Why have I seen children nude and bruised, sitting, sleeping and eating with moist or dried feces covering them and their surroundings?

Why have I seen children lying on filthy beds, uncovered, flies crawling all over them?

Why have I seen children playing in and eating garbage?

Why have I been forced to view my brothers, and the world in which they live, as if I were standing in garbage, as if it were to consume me?

Form in your mind's eye this scene, this continuation, this last vulgar ounce of value squeezed from those least valued. Visualize this short true story.<sup>2</sup>

Fine grains of snow fall gently on the roughly hewn gray stone fort. Inside, amid the harsh lives and broken thoughts, a procession silently and fleetingly mourns. Those who comprehend learn that one has passed and they mourn, not for him, themselves and for each other.

They mourn for lives lived without hope, that end without meaning.

They mourn for a soul used in his lifetime as material, whose bones and meat continue to serve science.

They mourn for those deadly years and, now, this restless death, swirling in gleaming vats in Boston and Syracuse, waiting for bright

<sup>2</sup>Based on infrequent involvements with medical school cadaver committees, experiences the reader may wish to forego. I have observed that certain deceased state school residents are selected for medical study as they were selected for institutionalization, and are treated in death as they were treated in life. On the average, each selected corpse involuntarily contributes one year of his eternal life to society before he is permitted his rest; he, of all people, who owes so little to society, from whom society has exacted so much, and from whom society has made his entire life---and now his death---a sacrifice.

lively boys in white to perform one final necessary obscenity.

They mourn for their wasted lives that shall end as this one ends, not cleanly, neither in sympathy for the living survivors nor with respect for the immortal spirit.

But, they mourn more for the creations of God and obstetricians than the final indignities imposed by chairmen of medical school cadaver committees.

For, the law requires that their bloated, mutilated and sewn flesh must be scooped together, someday, and returned to the earth they long for, the earth that will treat them more gently than the world that spawned them.

For is there a law, is there an authority that can do for one--- in life---what all beings achieve in death?

Is there a mundane justice that, however infinitesimally, compares with the equality and brotherhood of the ground?

Dare we believe that there is a faithful conclusion, even for one whose life is as faithless as his mortal mission is senseless, as it is a violation of his right to be faithful?

Dare we hope that dead people bear no grudges, even as the living remorsefully pursue the unforgiven unblessed departed?

I have brought up the past and now the deceased. What of the living and how may we predict the future? For the living confound as we are drawn to them. Can there be a better world for the mentally retarded? Asking the question implies that, indeed, there can be a better world, that, in retrospect, this is a better world. Asking the question denies the inevitable answer.

Some among you may conclude that an insuperable chasm lies between this discourse and evidence. Some may claim that I bring the softest

data to support these words. In truth, I need no data, for everything reported here is well known to those who know about such matters; and anyone who requires data is unlikely to put such evidence to useful purposes. We need no data to conclude that there never was, there isn't now, there will not be a better world for the mentally retarded.

There cannot be a better world for the mentally retarded, or a poorer world, or any world. Worlds and futures are for the living, not for labels and nomenclatures and retards or defectives. Worlds are for lives, not for things or prejudices or administrative configurations. The mentally retarded are no more people than is the photograph a person. To understand this permits one to appreciate the beauty of a Helen Keller and to realize that---while she was not mentally retarded---before she was not mentally retarded and before Anne Sullivan, she was mentally retarded.

We are trapped. Now that man has created the "mentally retarded" (and the "mentally ill") he must label and categorize him, not only as he seeks to help him---irony of ironies---even as he struggles to wipe away the effects of his evil taxonomy, even as he strives to erase forever the taxonomy itself. As I entreat you to destroy the concept "mental retardation", I find myself using the term as you use it, adding to the layers of inhumanity heaped upon those souls so foully designated. As I tell you there is no future for the mentally retarded---there will not be any until they are returned to their brothers as men and women---as I tell you these things, I meander about human beings as "mentally retarded". We are trapped by civilization's penchant for creating insane problems. And, our brothers and we will not be rescued by psychologists or sociologists or special educators---and, although they will better describe and teach us about the benchmarks of civilization,

not even by poets or historians. We have a modest chance to permit the now-retarded, the now-disturbed, the now-abused to enter our world--- albeit an imperfect world---and, I believe, that chance depends upon a decision society must make, but only insofar as each man must make his personal decision.

Men can no longer hide their faith and their souls in the United Nations or with any other group. What we have done to each other no nation and no group can rectify. What I have done to you, only I can repay and correct. Before each man seeks to change the world, he must change. Before these words become more than just words, I must become more than I am now. As I lament on the plight of mankind, I must account for my own plight:

For, who can tell a man, "We will make up to you for the lost years?"  
 Who can return to a man the sweet pleasures of a summer day,  
 His wife and carefree children at his side---  
 To a man destroyed before his marriage,  
 With children never to be conceived?  
 Who can describe the fragrant sensation of a pine covered  
 hill in May,  
 Backdropping a neat farmhouse overlooking fields and streams,  
 And living things---  
 To one who had hardly lived and had barely been given time to  
 stop,  
 And gather in these wonders?  
 Is there a man who can claim, "I have seen these times restored,  
 I have been given back the years that were taken,  
 The flesh that was ravaged,  
 The being that once ceased to be?"  
 Who will unfold the years that are gone,  
 The times that are past,  
 The moments that are wasted,  
 This instant that will never again be?  
 When a man thinks about these questions, he cries.  
 He doesn't cry for mankind, nor for you.  
 He cries for himself and for the wasted times in a  
 Desolate and plundered  
 Cosmos.

Man is a wise fool and a sentimental sadist. Is this his natural manner? The fundamental question is whether man is able---and, if as

I believe he is able, is he willing---to change. Both fearfully and hopefully, I conclude that, if he doesn't change, nothing will matter. And, if he doesn't, all of our past could not have mattered. If he doesn't, he will have become an example of the Rabbi's ancient saying that God gives wisdom only to those who have wisdom.

Further, I believe that what each man does---and how his every act causes and effects---is more than a reflection of his selfhood. It is a re-creation of it. But, what has he fashioned?

Man differentiates himself from other beings.  
He has speech.  
He can protect himself from the elements.  
He can leave the old and adapt to a new environment.

Man's speech, his clothing, and the ingenious ways he travels and migrates,  
Allows him to be freer than:  
The Eagle  
The Jungle Beast and  
Even  
The Wind.

Man is capable of controlling the forces of nature more that they are capable of controlling him.  
But man has not demonstrated his capability to control himself.  
And that which permits him to fly, to build, to shape his destiny,  
Causes him to impede and destroy other men.  
That which gives some men, their freedom gives enslavement to others.  
That which makes man uniquely free,  
Makes him uniquely harassed.

Our gifts are our demons.  
Never having spoken, the lion roars with a roar.  
Hardly moving, the snail creeps.  
In his pond, the fish is free.

But man, prideful and eloquent man!  
He disdains the mute and struggles against a relationship with them.  
He binds the crippled and increases their spasticity.  
He restrains the weak and incompetent and guarantees their infirmity.  
He envelopes the old and feeble and insures their loneliness.  
He segregates the ill and recreates their mental and spiritual disabilities.

Man enforces his retribution on those who do not speak by incarcerating them.

On those who do not think by chaining them.

On those who do not conform by denuding them.

On those who will not be broken by breaking them.

The animals have fewer gifts than man but

fewer imperatives

fewer options but

fewer requirements

fewer accomplishments but

fewer needs.

Animals are less civilized than man, but have more civilization.

Animals have less freedom.

But the animal world has more freedom.

Mankind has enslaved his brothers and himself.

Some may wonder why I wrote this paper. There is a compelling Israeli dialogue, where a visitor asks, "Why did you come here?" The Israeli replies, "I came to Israel to forget." "To forget what?" "I forgot."

I wrote this paper to remind those who have forgotten and to help instruct those who claim not to know. For there are other compelling words, born and nurtured and, forever more, carved in the soil of Dachau:

"Remember us. Do not forget."

Our Jerusalem will be the back yard. And, we must not forget its existence---and all of mankind's ideological back yards---until civilization makes it unnecessary for us to remember.

Most of all, I wrote this paper to remind myself. I must not forget.



## Ground Rules for Behavior Modification

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Behavior modification, as a technique, has been utilized by individuals representing a variety of disciplines: clinical psychology, psychiatry, social work, nursing, and education. Most of these disciplines contact the exceptional child on an individual basis. Conversely, educators have attempted to abstract some of the principles learned on a one to one basis and apply them in the context of the classroom. In so doing, several problems unique to education have arisen. Whether respondent or operant conditioning can be used in a pure sense by a classroom teacher is a topic worthy of debate.

The ground rules enumerated below are meant to apply primarily to the educational setting, however some may be applicable to other settings. Nevertheless, the focus of this paper is on the application of behavior modification in the educational context. Another point which needs clarification before going on regards the distinction between theory and practice. It is not an uncommon thing to encounter a teacher who claims to be using the "Haring System" or the "Hewett System," and yet the interpretation of what Hewett and Haring have said and how it is implemented may not even faintly resemble the original statements of either of these men. Consequently, some of my remarks will not be valid criticisms of the advocates but rather criticisms

of their disciples. The ground rules listed are some which this writer feels should be given to prospective or in-service teachers whose theoretical background in learning theory varies from meagre to thorough. Regardless, the possible misuse of these techniques may have devastating consequences for the child labeled mentally retarded and placed in a classroom in which behavior modification (as interpreted by that individual teacher) is used.

Rule #1: Behavior modification must remain a technique within the larger context of education. That is, it must remain a means to an end rather than an end, in and of itself.

Behavior modification is a technique, and therefore does not determine educational goals for children. Hence, familiarization with behavioral management techniques does not minimize the importance of teachers being versed in various subject-matter areas and developmental theories which do specify developmental stages (for example, Erikson, Havighurst, and Piaget). Herein lies the information which will help guide the teacher in the determination of the skills a given child must master in order to achieve subsequent levels on a given developmental hierarchy. Without a developmental framework and a solid basis in subject-matter areas, the teacher rather arbitrarily decides what the child must learn.

Hewett et al discuss the lack of balanced emphasis on goals and methods inherent in behavior modification. They write:

In general, selection of these goals is based on a desire to aid the child in changing maladaptive behavior to adaptive behavior. At best, these concepts of "maladaptive" and "adaptive" provide only the broadest of guidelines for selection of specific behavioral goals. In this sense, the powerful methodology of the behavior modification approach is not matched by concern with goals in learning. Teachers are provided with an efficient means of taking emotionally disturbed children someplace but are not substantially aided in the selection of where to go. (1969, p. 523)

Without the alternate information provided in coursework and reading in the fields of child development and curriculum the "behavioral engineer" becomes an idiot savant as a teacher.

Another danger inherent in the adoption of a rigidly implemented behavior modification program in a school district lies in the possibility that a child will be in a structured "engineered" setting from the time he enters the special education track until he quits school or graduates. With others (i.e., the teacher) constantly determining the goals and the tasks, the child is never allowed to take responsibility and initiative in the educational process. Gradually, the number and intensity of the cues available to the child must be faded until he ultimately directs his own behavior to practices which foster the development of self-direction. The alternatives to self-direction are the antithesis of one major goal of education. That is, the child must be allowed to develop self-direction. In a teacher dominated classroom, regardless of how well controlled, behavior modification is being used to benefit the teacher -- not the children. This will be discussed subsequently.

Rule #2: The terminal behavior defined as the goal must be determined on the basis of what is in the best interest of the child--not the teacher.

Ullmann and Krasner state that the first question asked by the behavior analyst is, "What behavior is maladaptive, that is what subject behaviors should be increased or decreased?" (1965, P.1) The objective analysis of behavior might reveal the answer to this question. The frantic teacher; however, is not likely to have the time or the skills to perform such an experimental analysis and therefore often asks a slightly different question. The question which actually gets answered is, "What behavior manifested by the child is most annoying to me as his teacher?" When this question is answered and the behavior modification program designed and implemented, one can only speculate regarding whether it is in the best interests of the child. MacMillan and Forness (in press) point out that a check on this possibility might be to ask a subsequent question, which is, "Is the behavior identified as maladaptive actually interfering with his learning?"

Wood (1968) cites study after study which have been interpreted to suggest that teachers, in general, are more concerned with maintaining power over students than in knowledge and skill transmission. To the extent that the above findings generalize to teachers of the mentally retarded, the potential consequences might be even more devastating since many of the rights of children so labeled are abridged at the time of labeling. There is little doubt regarding the power of behavior modification as a technique. However, the changes in behavior

resulting from its use or misuse may not be in the child's best interests. Wood writes:

These teachers may often be those against whose already abusive application of their authority pupils have the greatest need to be protected. Like many "tools", behavior modification techniques are themselves morally blind. Like a stout sword, they work equally well in the hands of hero or tyrant. Any person of moderate intelligence can, with assistance if not independently, apply them with great effectiveness for good or ill. (1968, p.14)

The right of the child to participate in the determination of goals should not be ignored. The use of contracts in a number of programs would seem to be a step in the right direction with regard to this point. Allowing the child to participate avoids an unfortunate result when it is skipped, that is having defined the child's present behavior as inappropriate he (the teacher) plans to shape it towards behavior he has defined as appropriate.

Rule #3: The axiom that "all behavior is learned" must not be interpreted to mean that "all children learn alike."

Throughout courses in the teacher preparation sequence one theme is constantly hammered home: Teachers must individualize instruction. One is impressed in reading through the clinical literature with the use of behavior modification as a therapeutic technique and with the elaborate and creative contingencies and reinforcements devised for use with an individual patient. The classroom teacher, however, is confronted with somewhere between 12 and 18 children and finds individualization of instruction and control a virtual impossibility. Hence, the classroom

programs based on behavior principles commonly abuse the individualization notion.

The teacher who does not individualize will cite evidence that schools assume that all children are reinforced by letter grades or teacher approval, and that this assumption is an invalid one. Yet, she will turn around and have her entire class working with check marks redeemable for tangible rewards as the accelerating consequence. Hence, the class has ALL children on check marks; ALL children receive the check marks at 15 minute intervals; ALL children are working on the same academic task; ALL children trade in their check marks at either the end of the day or week, which in ALL cases are redeemable for the SAME tangible prizes; and ultimately ALL of the children will go off of check marks at the same time in the year. Granted this is an overstatement of the case, however the violation of any one of the above actually violates the existence of individual differences in children. Children vary considerably in the ability to delay gratification; they vary in what constitutes a reinforcement for them; they vary in the speed with which they achieve mastery over a particular developmental stage; and they need varied programs in order to meet their varied needs.

**Rule #4:** The teacher has a responsibility to lead the child along a continuum to more mature levels of performance. That is, the child must not be allowed to stagnate at a reinforcement level on the continuum below the level at which he is capable of functioning.

In an earlier article (MacMillan, 1969) a tentative continuum

was postulated for both accelerating and decelerating consequences. Moving from the most primitive accelerating consequence and progressing to the most mature:

- (1) food
- (2) tangible rewards (toys or trinkets)
- (3) tokens or check marks redeemable for tangible rewards
- (4) symbolic rewards (letter grades or graph)
- (5) social approval
- (6) being correct
- (7) sense of mastery

A continuum for decelerating consequences might include (again in increasing order of maturity):

- (1) electric shock (extreme punishment)
- (2) spanking (mild punishment)
- (3) denial of privileges or removal from rewarding setting
- (4) verbal reprimand
- (5) social disapproval
- (6) being incorrect
- (7) self-disappointment

Whereas much writing in the educational literature deals with the sequential steps necessary to direct a child from one level in any subject-matter field to the next step, precious little in the behavior modification literature has dealt with the movement of children from one reinforcement level to subsequent stages. Skinner (1953) recognized a reinforcement continuum, however little systematic research has been

done on this topic. Hewett (1968) postulates an hierarchy of reinforcers within his rationale for the "engineered classroom", but again little verification of his steps has appeared in the literature.

This writer has observed in classrooms where a teacher has had the entire class on a check mark system for a period of two years. When one of the teachers was asked when she was going to start moving the children on to subsequent levels, her response was: "Why, I'm not going to fool around with something that is working." Such a response reflects the danger mentioned in Rule #2. Obviously, the check mark system was for the teacher's convenience, not the children's.

If one of the major goals of education set for all children is to get them to be self-directed learners, they must move along the reinforcement continuum. If not, learning outside the formal and supervised classroom is unlikely. The teacher must undertake to pair those accelerating consequences with consequences higher on the continuum. Through association the more mature reinforcers should take on reinforcing properties. For example, if the child is considered to be functioning at the token or check mark level, then each time the teacher provides the token or checks they can be graphed; each time the graph is filled in the teacher should give social approval. In so doing, the child's response to reinforcements is shaped in somewhat the same manner his behavior is shaped by reinforcing successive approximations.

Rule #5: The behavioral engineer should recognize that certain of the constructs utilized in behavior modification are reductionistic in nature.

Rather than going into great detail here, the reader is referred to an article which will appear soon in Exceptional Children by this



writer and Steven R. Forness. In that article considerable detail is devoted to outlining the ways in which the behaviorists have reduced the concepts of learning, motivation, and reinforcement to the extent that they can not encompass much of the experimental work in the field.

Briefly, a view of human learning in terms of discrete, operational steps ignores the inherent logic in the material to be learned. Gagné, for example, contends that the nature and structure of the task which is to be learned is of greater importance than the principles of learning such as reinforcement and practice. The behaviorists' operational definition of learning ignores much of the research on children's learning reported by Piaget and his associates (Flavell, 1963).

Defining motivation in terms of the manipulation of consequences contingent upon the organism behaving in a desired fashion ignores the sources of motivation described by: Piaget (Hunt, 1961) regarding the "match" between the schemata of the child and the task; Festinger (1959) regarding stimulation-seeking behavior arising out of cognitive incongruities; Harlow (1949, 1953) regarding the apparent innate curiosity drive; or White (1965) regarding competence motivation. All four of these noted psychologists, based on extensive research, describe intrinsic sources of motivation found difficult to explain within the context of learning theory with its emphasis on observable and measureable behavior.

By defining reinforcement as "a stimulus which increases the likelihood of a response" a separation of natural and arbitrary reinforcers is fostered. Forster (1966) provides an interesting discussion of this separation, and in conclusion opts for natural reinforcers whenever possible. Logically, it follows that if a child becomes accustomed to having his reading reinforced by check marks his behavior (ie, reading) is not

likely to generalize to settings outside the classroom, since his natural environment is not likely to reinforce reading with check marks.

In conclusion, the extensive research on behavior modification has revealed a number of useful techniques for changing behavior. When applying these techniques in an educational setting one must recognize the unique situational variables and deal with them. Behavior modification techniques must be viewed as a supplement to other educational tools -- not as a substitute. The ground rules specified in this paper will hopefully provide some guidance to achieve that end.

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## BEHAVIOR MODIFICATION AS AN EDUCATIONAL AND TRAINING TOOL

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One of the more widely quoted definitions of behavior modification and that which has been implicit in our discussion this afternoon is that of Ullmann and Krasner, "...the application of the results of learning theory and experimental psychology to the problem of altering maladaptive behavior" (1965 p. 2). It is a definition with considerable latitude. It describes, in essence, a twofold contribution of behavior modification to the problem of mental retardation:

- 1) the manipulation of consequences in changing behavior.
- 2) the application of systematic observation to education and/or treatment.

In my own field of special education, behavior modification has been either suspect or somewhat misused because many teachers have focused on tangible rewards and failed to appreciate the implications of systematic observation.

I am reminded of a story about an American soldier during World War II who was searching for a seat on a very crowded British train. Heavily laden with duffel bag, he had walked up and down the aisles till at last he came to a compartment where only five of the six seats were occupied by people. On the sixth, however, sat a small bulldog next to a portly and very imposing British matron. Inquiring politely of the matron if he might remove her bulldog and take the vacant seat, he was met with the stern and stiff-lipped retort, "Don't touch the dog!"

Considerably abashed, he closed the compartment door and continued his search elsewhere. Sometime later, having traversed the entire length of the train with no seats to be found, he made his angry way back to the compartment, only to be met with the same rebuttal. Patience at an end, he exploded into a lengthy tirade, making no little mention of his fatigue, his unfulfilled search, the heaviness of his duffel and the fact that he, an American, had helped to defend British lines only to be pre-empted by a bulldog. Goaded further by the familiar rebuttal, he seized the dog by the scruff of the neck, lowered the window and hurled the poor creature out into the passing night.

There was complete stillness in the compartment, as only there could be after such an unseemly performance. After some time, however, an elderly British gentleman lowered the newspaper over which he had been discreetly regarding the situation. Relighting his pipe, he calmly remarked, "You know, young man, you Americans go about everything the wrong way. You drive on the wrong side of the road, eat with the fork in the wrong hand, and now...now you've gone and thrown the wrong bitch out the window!"

I suspect that many teachers have thrown "the wrong bitch out the window.." Teachers are overcoming their apprehension about the behavioristic approach as being strictly impersonal, manipulative and mechanistic. That they retain in their growing enthusiasm, however, may be an overemphasis on H & M's, check mark cards, and other external trappings of behavior modification.

I suggest that tangible reward systems are not those aspects of behavior modification which may have greatest impact. Its ultimate contribution, particularly in mental retardation, and one that teachers often neglect (or throw out the window) are those techniques which help

teachers be more systematic with a variety of methods they already use.

### The Teacher as Researcher

The behavioristic approach has generated a great deal of research into the efficacy of teaching and classroom management strategies (Whelan & Haring, 1966) and, by necessity, has introduced research methodologies, particularly systematic observation, into the classroom. Of particular value to teachers and school psychologists is the technique of recording and charting of behavioral data. Charting consists of recording the frequency of behaviors over a period of time on a graph or chart in order to determine behavioral trends. It is a technique originally conceived I suppose by laboratory researchers but it has a number of levels of sophistication, and teachers may adopt and develop their own format to bring similar precision into the classroom.

By way of illustration, let us suppose that a teacher has in her class a retarded boy with a number of behavior problems which tend to interfere with classroom learning. Such situations often appear overwhelming unless broken into components. The teacher selects out-of-seat behavior as the first component she will attempt to deal with since she decides, at this point in time, it is the most disruptive. Before attacking a problem, she must first decide how much of a problem exists. The boy is obviously not out of his seat 100 percent of the time and possibly not during every period of the day. Certain conditions prevail. Therefore the teacher must determine during which periods or activities the out-of-seat behavior occurs as well as the frequency and duration of the behavior.

On a chart of her own design, she puts a check each time the boy gets out of his seat during in-seat activities. Should she wish to record duration of the behavior, she could place a number representing the actual or estimated number of seconds he remained out of his seat. The chart can be divided by squares representing, for example, each activity throughout the day or the day broken into fifteen minute segments. By piecing together observations of charts over a number of days or transferring all the data to a single graph, certain trends might become become obvious. For example, the teacher might observe that checks appear most frequently during the first fifteen minutes of the nine and ten o'clock hours and perhaps not at all during other hours.

A behavior problem thus brought into focus is much easier to attack with an intervention strategy since the target becomes limited to certain parameters. The teacher can seek for antecedent or subsequent events which maintain the behavior during those periods much more easily than aiming in shotgun fashion at the entire classroom day.

The chart may then serve as a baseline against which to measure effectiveness of behavioral intervention. Suppose the teacher discovers that these two periods, by coincidence, have been devoted to independent seatwork. She hypothesizes that the relative lack of structure associated with independent work might be particularly difficult for the child to handle and that he needs further motivation in the form of teacher attention. The teacher could structure the situation in such a way that she comes to his desk twice each period to check his work but ignores him otherwise. While checking his work, the teacher also makes it a point to praise him for his performance and behavior. She thus gives

him systematic attention he can count on. The teacher then continues to record frequency of out-of-seat behavior as before. A decrease in checks during the two periods confirms the above hypothesis and demonstrates the effectiveness of the teacher's strategy. If no decrease is observed, the teacher abandons the hypothesis in favor of another or searches for an alternative strategy and repeats the process.

Obvious variations of the technique are possible including having the child chart his own behavior or even, perhaps, chart similar behaviors of other children (Patterson 1965). An advantage of either method is that the child, in labelling the behaviors, is forced to an awareness of misbehavior and in effect "thinks twice" before acting.

The cumulative effect of charting is precision. There are, as I have said, a wide range of charting techniques and for the more precise method of pinpointing behaviors I must yield and refer you to the people of the Experimental Education Unit of the University of Washington (Cohen and Kunzelmann 1969). But even with a simple paper-and-pencil tally sheet, the teacher, like the educational researcher, comes to base his decisions on objective evidence rather than speculation.

Charting of behavior is quite helpful in teacher education. It is often misleading for a teacher to rely on her own on-the-spot judgment in making educational decisions. Since many things are happening in the classroom simultaneously, it is difficult to process meaningful information on a single problem. A certain amount of reduction has to occur. If she has been trained, however, to look for and record, only certain predetermined behaviors, she can go back after class and inspect the chart at her leisure. She may discover trends of which she may not



have been aware "in the heat of battle" and be then able to make decisions based on data. In a sense, charting enables her to stand momentarily outside of herself and look back in upon her own teaching strategies.

With such observation techniques, the teacher then has at her disposal a valuable tool with which to approach a variety of classroom problems and with which to initiate and evaluate a variety of classroom strategies. Bringing data (and not just a hunch) to bear on classroom transactions has been a prime contribution of the behavioristic approach.

#### The Teacher as Reinforcer

A related contribution of behavior modification as an education and training tool is to enhance the effectiveness of reinforcers which, as was indicated in the previous paper, are available in the natural environment and are used daily by nearly every classroom teacher. The misfortune of both children and teachers alike is that these reinforcements are seldom used systematically, and their effectiveness is thereby missing or considerably diminished.

A number of studies have demonstrated the powerful effect of teacher attention on student performance. One of the most widely quoted was done by Zimmerman and Zimmerman (1962) on spelling behavior. In a sense it is a classic in the field and concerns a boy who appeared to have difficulty in spelling and, when called on, would flounder and have to be urged and prodded by the teacher. The teacher's response (giving attention) was viewed as actually reinforcing the child's misspelling. The child was receiving the teacher's attention (urging and prodding) when he misspelled the word, and he supposedly continued to do so in

order to maintain that attention. The teacher was instructed to ignore the boy unless he spelled correctly. After writing the word incorrectly, he looked for the teacher to correct him. The teacher, however, continued working at her desk and ignored him. After a period of waiting and misspelling, he began to spell the word correctly. At that point, the teacher looked up, smiled and gave him a word of encouragement. The subject eventually responded to the contingencies and the adaptive behavior (correct spelling) was increased and maintained as a result of selective attention.

Teacher attention is particularly important in the area of mental retardation if we note Zigler's motivational hypothesis. Zigler (1963) found that institutionalized retardates tended to persist longer on a monotonous task than non-institutional retardates as a function of social reinforcement. A study by Jack Gewirtz and Donald Baer (1958) indicated that even for normal children, being left alone in a room for twenty minutes, as opposed to spending the same amount of time talking with the experimenter, had a marked effect on the power of verbal praise in a task which followed immediately. When one considers that impoverished environments are typical among the general population of retardates (Hurley 1969), teacher attention would appear to be substantially reinforcing even for retardates in community school settings.

It is helpful in training teachers to point out certain aspects of their attention. Even though the attention is unpleasant, it may be perceived by some kids as better than no attention at all. As Becker has pointed out, for some children, the only teacher attention received is that which follows misbehavior, and the teacher thus unknowingly maintains such behavior (Becker, et al. 1967).

It is of further interest to note a possible "spill-over" effect of teacher attention. In a study by McManis (1967), subjects who were not themselves the object of verbal praise by an experimenter, increased in task performance as a result of sitting next to a partner who was praised. Teachers, of course, should be aware of this "ripple effect" and its impact on their own classroom.

In a sense, the degree of attention is important. We found in a recent pilot study with pre-school retardates (Forness and Saltzman 1970) that systematic physical contact had nearly as great an affect on task performance as food. Patting or rubbing a kid on the neck or head was reinforcing but hugging was even more rewarding. Although verbal praise, friendly looks, smiling and hugging are used by most pre-school teachers, the behavioristic approach seeks to increase effectiveness by helping the teacher use these more systematically as a consequence of behavior.

### Conclusion

It is unfortunate that behavior modification is not consistently included in education courses for teachers of the retarded. It is perhaps even more regrettable that it's not part of the curriculum for all teachers. It is the regular class teacher who, in most cases, inititates the process which eventually pins the official label "retarded" on the child in the form of special class placement. Many such retarded children may be casualties of "the system." I am sure there are a number of retarded children who might never have been relegated to special class placement had the classroom environment been different - more predictable, systematic, individualized - had perhaps she, as well as the special class teacher, held the behavioristic approach: If the kid's not learning or behaving, it may not be his fault; it may be mine.

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# "IS MEASUREMENT OF ADAPTIVE BEHAVIOR HELPFUL FOR PROGRAMMING?"

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Central Wisconsin Colony

Any topical discussion which deals with the subject of programming behaviors must be a challenging one. It is especially challenging when one is concerned with institutionalized residents who are in the more severely mentally retarded ranges. It is felt by some that behavior in and by itself in these cases is not important, that adults and children alike should be perceived as "sick" infants who should be fed, clothed, and "mothered" in as physically attractive setting as possible.

In considering these cases there are even more difficulties. Certainly one difficulty, which touches upon not only the more severely retarded but all levels of retardation as well, is the refusal to consider specific aspects in program development. We hear of behavioral modification of specialized training and educational procedures, and so forth. We also hear of such terms as "multidisciplinary," "interdisciplinary," and "communication." These are important subsidiary concepts in program development. Often little more than lip service is paid to them. As a result, there are few instances of routinely applied, workable, therapeutic, residential programs which can be objectively measured and evaluated.

There are, of course, many reasons for the absence of residential behavioral programs which can be developed along objective and systematic lines. Negligible institutional budgets, very limited ward staffing patterns, lack of appropriate supervisors, as well as a fair number of

underlying motivational variables contribute a share to the lack of programs in adaptive behavior. Granted the truth of these statements, there is yet the need to provide objective and systematic methods to develop behavioral programs for institutionalized residents and to measure and evaluate their effectiveness.

Our purpose, however, is not to reform this state of affairs. Rather, it is to provide prototypes to establish, measure, and objectively evaluate residential programs. These prototypes or program models are designed to accomodate more severely retarded residents and would specify applied research procedures for program development in residential institutions as well. To accomplish this, we will present several paradigms. The first paradigm describes an empirical method to develop and evaluate routine residential clinical programs in adaptive behavior. The second describes a number of research proposals which provide criteria to develop more complex programs in order to improve adaptive behaviors in the more severely retarded.

### Method

To accomplish this, we began by developing an extensive item pool of the behaviors of ambulant severely and profoundly mentally retarded residents at Central Wisconsin Colony. This resulted in the Central Wisconsin Colony Scales of Adaptive Behavior. Using the method of direct observation, the behaviors were subsequently broken down into separate categories: a) those representing functional independence, or eating-drinking, dressing-undressing, and toileting skills, or what is now Form I of the CWC Scales; and b) those which represented social coping behaviors

or Form II of the Scales.

The raw data which were obtained from the observations were transformed into simple linear and into more complex scales. A detailed account of the statistical procedures involved in these transformations are reported elsewhere. (See Balthazar & English, a, b, and c). The scales were designed to be administered by rater technicians who were specifically trained for the purpose. Please remember that the raters technicians provided evaluation services which were independent from those rendered by treatment personnel. To achieve objectivity, the technicians were not involved in modifying behaviors, nor in any way were they concerned with treating or training subjects. Except for the toileting scales, the technicians provided data which were based upon direct observation and did not rely upon verbal report. (Balthazar, & English, a, b, and c).

#### RATING PROCEDURES

Orientation and Pre-baseline Studies: Our first figure describes an input-feedback system which provides the basis for routine clinical studies.

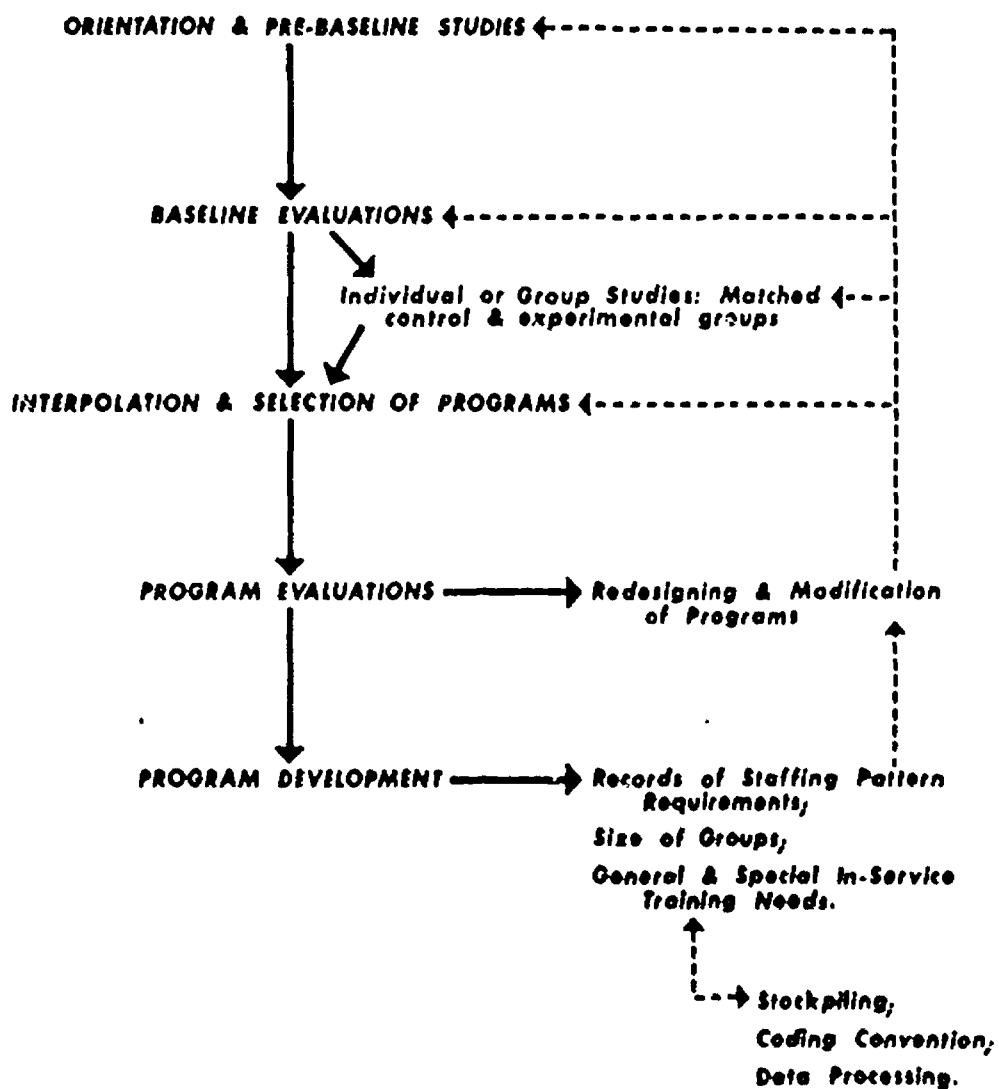
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Put Figure 1 about here

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In general, the rater begins his evaluation procedures by observing the subject or subjects before baseline administration studies are made. The purpose of these preliminary or pre-baseline studies is to acquaint the rater technician with the subject(s) and with their behaviors, and also with specific ward procedures. The orientation or pre-baseline studies permitted preliminary program planning on the part of professional personnel; encouraged contacts between ward personnel and professional staff;

## INPUT-FEEDBACK SYSTEM FOR CRITICAL DECISIONS





and provided a decision-making basis regarding the selection and matching of subjects for individual and group studies.

Baseline Evaluations: After these preliminary procedures, the scales are administered. The technician then scores the data for profiling purposes. Frequently, the technician supplied either dittoed handouts showing graphs of the profile scores, or prepares the scores for visual presentation using an opaque projector.

The profile scores used in the baseline studies represented, as we have said, a continuum of eating-drinking, dressing-undressing, and toileting skills, as well as socially adaptive behaviors. The profile scores themselves expressed very fine dimensions and broad ranges of these behaviors. The specific nature of the subscale items therefore facilitated selection of target or terminal behaviors by the professional staff.

Selection and Interpolation of Programs: The professional staff also undertook at this point to choose a particular program to modify or change the behaviors which are expressed by the profile scores, and were responsible for decisions regarding all phases of treatment. Program responsibility was provided by interdisciplinary program staffing committees or by a program coordinator. (We have discussed the nature and role of interdisciplinary staff committees elsewhere (Balchazar & Stevens, 1966).) Briefly, such committees were concerned with the choice of program which included operant conditioning studies, milieu therapy, combinations of these, or some form of specialized training. Judgments regarding program

effectiveness were held in abeyance until retesting operations were completed.

Program Evaluation: Once the treatment goals were selected and the programs thought to be appropriate to them were developed, periodic retesting was provided. Program evaluation consists of measuring differences in performances and these are seen as critical determinants of program effectiveness. The rating and interpretation of behaviors were supervised by trained psychologists. The psychologist was a member of the program staffing committee.

When the profile scores which were obtained from retesting consistently expressed stable differences in the predicted direction, then program effectiveness was hypothetically inferred. If such were not the case, the retesting data furnished a basis for feedback and programs were redesigned and modified accordingly.

Program Development: To achieve accuracy in measuring effectiveness, the professional staff administered the same programs to different groups of similar subjects. Subjects could be classified in this manner by using profile scores which were provided with a specific coding convention (Balthazar & English, a and c). With repeated "tests" of this nature and with available supporting data, the programs could then be rather informally "stockpiled" for future use.

Feedback in Program Development: Figure 1 provides operational sequences which are analogous to an input-feedback system. The operational sequences depicted by the paradigm in Figure 1 are interdependent and are designed to provide data for more routine decision-making.

Superficially, it is true that the paradigm in Figure 1 may resemble similar modus operandi in some residential institutions. There are however, some differences in objectivity between present procedures and those procedures which are conventionally represented in current institutional practices. The critical decision points in Figure 1 are based directly upon baseline performance data which provided the criteria for making judgments. This provides a difference between present procedures and those occurring in residential institutions.

CRITICAL DECISION-MAKING: We might at this point ask the question as to what critical decisions are to be made in order to measure programs in adaptive behaviors more extensively. As we see it, critical decision factors comprise four main types or categories, as follows.

(1) Decisions Involving Individual or Group Studies: Ordinarily there is little difficulty in choosing between individual or group studies. When group studies become the objective, additional judgments must be made in many instances to obtain sufficient data so as to equate experimental and control groups. To compare individuals within groups, a good deal of specific information is required. When groups are matched, as it sometimes occurs in the literature without the benefit of sufficient data, matching is often superficial and is more apparent than real.

However, when the available behavioral data are complete, decisions must be made regarding the selection of the critical variables to be studied. Additional decisions must be made of a similar nature regarding the homogeneous grouping of subjects for further investigations. Often grouping or placement procedures in residential wards are quite superficial, accomplished on the basis of age, sex, and IQ alone. In using Forms I and

II of the Central Wisconsin Colony Scales of Adaptive Behavior, however, matching can be accomplished by employing the profile scores, using five individual categories of eating; or providing profile scores representing dressing-undressing and toileting behaviors, as well as those which utilize a variety of social coping behaviors. Obviously, in employing so many behavioral dimensions, decisions must be made regarding their selection.

(2) Redesigning and Modification of Programs: Surely, critical decisions in this category are among the most crucial and important to program development and evaluation. Such decisions should be based, whenever possible, upon objective measures rather than opinion or precedent. The redesigning and modification of programs should be based upon empirical findings, using performance data as the criterion. Changes in program then should be based directly upon measurable changes in performance levels. Subjectivity in decision-making will occur, however, with respect to the judgments regarding the size of increment which represents performance change, even though the scores may be in the appropriate direction. A number of questions may be asked regarding the matter of subjectivity here. For example, is the increment of sufficient size to warrant endorsement of the program? Is it too small? Should we use non-parametric or parametric statistics to employ tests of significance to measure differences in performance levels? And what does statistical significance really mean when it is used to measure critical differences in adaptive behavior?

Actually, the answers to these questions, or at least a partial answer to them, lies in careful study of the profile scores themselves, employing as we must the constructs which are obtained from studies of learning and reinforcement. Again, the answer to the problem is empirical and experimental.

### (3) Staffing Pattern Requirements: General and Special Training

Needs: These are combined, since they are governed by very similar principles. Certainly, we think it extremely important, when planning or developing programs, to have objective measures of program staffing, or manpower requirements. A frequently used method to determine manpower needs in residential institutions is provided by time-and-motion studies. The ultimate purpose of these studies, which have been borrowed from industry, is to eliminate unnecessary and repetitious work procedures, to simplify and standardize task operations, to integrate and organize effective work output, and to improve work environments by redesigning them.

Although the intention in using time and motion studies under these circumstances is often a worthy one, it begs the question because there is little knowledge regarding the appropriateness of the program. Unlike industry, knowledge of production and quality control in manufacturing a product is missing. There is no real evidence concerning the effectiveness of the program under study.

Nevertheless, the value of manpower studies becomes evident when the value of the program is known. Once this has been ascertained, manpower or staffing pattern studies can provide appropriate dependent variables for further investigation.

To a considerable extent, this principle also applies to needed in-service training levels. In order to develop programs, it is necessary to know the requirements for specialized and general in-service training. How long will it take, for example, to train three aides to become proficient in operant conditioning techniques? What are the appropriate training levels for ward personnel who are responsible for the general care of the resident?

(4) Stockpiling Coding Convention: Data Processing: And, finally, to complete our critical decision-making list, we come to the matter of stockpiling programs. The primary purpose of stockpiling is to establish a reservoir or pool from which appropriate, empirically tested programs may be drawn. To identify such programs, however, it is necessary to employ a coding convention which is based upon the profile scores. We have developed a coding convention for this purpose (Balthazar & English, a and c). A coding system may also be established for eating-drinking, dressing-undressing, and toileting behavior without difficulty. Moreover, the coding convention may be adapted easily for keypunching and stored in a central location for retrieval purposes.

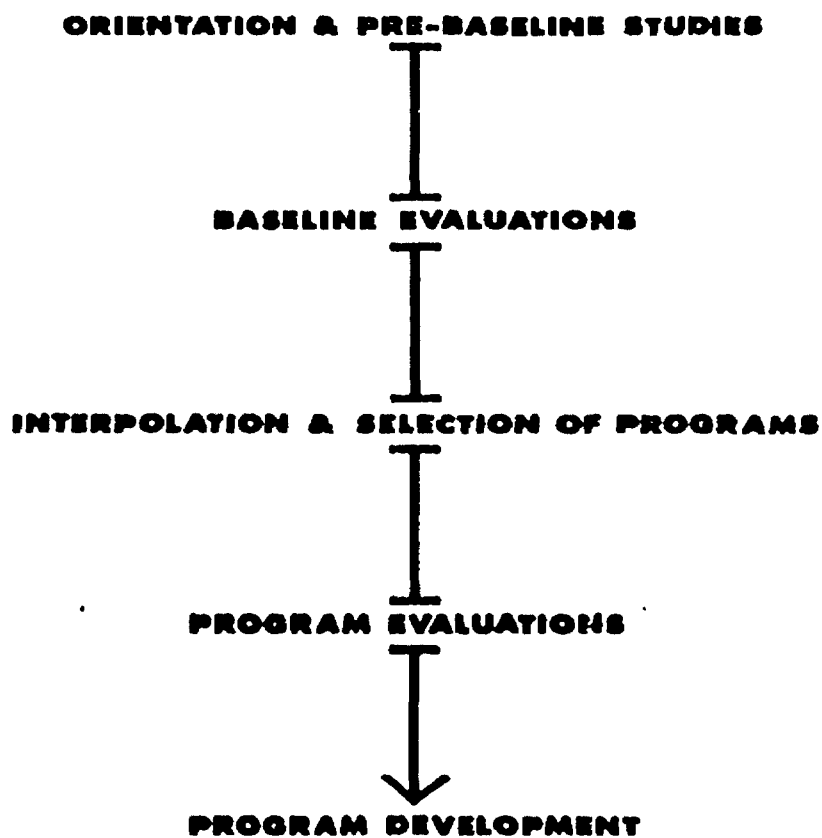
INPUT-FEEDBACK SYSTEM FOR CRITICAL DECISION-MAKING: Figure 2 reintroduces the feedback concept which provides the basis for critical decision-making.

But Figure 2 about here

Note that Figure 2 represents the attempt to correlate critical decision-making points with the operational procedures which were delineated in Figure 1. Figure 2 also depicts a much more sophisticated arrangement than that depicted in Figure 1, since we are concerned with the baseline behavioral dimensions from which we can match a number of experimental and control groups.

Group Studies and Baseline Evaluations: For this reason, Figure 2 depicts not routine clinical operations, as does Figure 1, but it represents the possibilities for more complicated research programs. Figure 2 is much

## **PROGRAM PLANNING & DEVELOPMENT**



more representative of the operational procedures which are necessary for stockpiling; and it describes operations which are essential to program development, if we are to take institutional programming seriously.

I think that this is rather a basic point. It would appear to me that the real contribution of institutional programs is in direct proportion to the benefits they bring visably to the residents. It would seem also, that the criterion for evaluation should be determined by rather basic, stable changes in behavior. And by behavior, we mean changes in functionally independent skills and/or interpersonal coping behaviors. But a certain degree of experimental rigor is needed to measure these. We need, for example, to control for age or maturational factors, for "placebo" effects, for changes in environment and in treatment for "Hawthorne" effects so-called, and so on. Controls of this sort are essential in measuring adaptive behaviors and are derived in part from careful grouping and matching of subjects. Matching, or equating subjects, in terms of control and treatment groups must utilize the data which are obtained from the baseline evaluations. Obviously, program evaluation must therefore derive from retest scores which indicate substantial and stable differences in performance.

Program Evaluation and Redesigning and Modification of Programs: Clearly, we now refer to the most basic and fundamental of decisions, those regarding the value or worth of routine programs in a given institutional setting. Undoubtedly, such decision-making represents a most provocative aspect in our presentation. However, little has been done, if anything, to thoroughly test routine institutional programs. Much has been accomplished, however, in testing the application of certain therapies in



specialized settings independent of the institutional settings. But lacking facility in multidisciplinary relationships, in professional supervision, and in levels of communication between ward and supervisory staff personnel present, formidable obstacles to the development and application of remedial programs have occurred when programs are applied on routine basis. The point being presented here is that it does not really matter whether or not a program will work under highly specialized conditions. Rather, it is important that objective research be accomplished so that it can provide innovative but workable residential programs on a routine, day-by-day basis. Along these lines, we submit that one way to accomplish this is by providing programs with a built-in system to evaluate and modify them when necessary. Once this is done, a number of decisions can be made.

Program Development; Staffing Patterns; Stockpiling; etc.: Naturally, empirically verified programs are extremely valuable as a basis for studying the effects of staffing patterns upon profile scores. Once a program has been proven to be effective for specifically identified subjects, it can serve as a dependent variable, since the profile scores will vary or remain relatively stable when we change the number of staff members.

Before this can be accomplished, however, it will be necessary to evaluate training levels. Here, we may employ a separate rating scale to obtain judgments regarding their levels of general or specialized training as required. Once these ratings are available, and this would include data regarding the value of the program, an experimental basis is provided for evaluating both staffing patterns and needed training levels.

Certainly, specific knowledge of these events is helpful in stockpiling programs for future use. Knowledge of the stability of the profile scores under changing environmental conditions and the similarities of the scores in appropriately classifying subjects are essential to these operations. Regarding classification, we have spent some time on this subject for this purpose (see Balthazar & English, 1969 a, b, and c; Balthazar, 1970).

### Discussion

Finally, we come at last to the question as to whether or not we think that the measurement of adaptive behaviors is helpful for programming. On the basis of our previous remarks, the answer is obviously, yes, if we proceed carefully along experimental lines to measure, classify, and evaluate such behaviors. We fully realize that under prevailing circumstances, in most residential institutions, it will not be easy. Unless we successfully apply experimental findings to designing ward programs, our approach to program development will be superficial. Critics of on-going residential programs may well be right in their assertions that the substance of such programs are more apparent than real, and provide face validity at best. The actual criterion for present residential programming will continue to be that which will sell, that which is politic, and whether or not it will continue to please a prevailing power structure. On the other hand, we must face the challenge also as to our capability in applying the knowledge to make alternative methods in program development possible.

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The Mental Health Technician (Associate) In  
The Psychological Service

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Introduction

The critical need for mental health manpower has been long recognized (Albee 1961). Hunter, et al. (1968) urged for an imaginative and a novel solution to meet this need. In recent years, the notion to train mental health workers at the undergraduate level has been widely considered by both mental hygiene experts and high learning institutions. Wellner (1968) pointed out that in order to meet the shortage of mental health personnel, one of the possible solutions was the development and utilization of the Mental Health Technician or Associate. Academically, the mental health technician program developed generally under two categories: (1) the programs which were developed by the community (Junior) college lead to an Associate of Arts degree, and (2) the programs which were developed by the four year colleges lead to a B.S. degree. One of the pioneers in the development of training program within a two year curriculum was introduced by Hadley and True (1967) at Purdue University. The conference on "The Community College in Mental Health Training" conducted by Southern Regional Education Board (1966) apparently facilitated the interests and the program development for many community col-

leges in the region.

Since the Mental Health Technician (MHT) programs are fairly new and the graduates are few, the exact functions of the MHT in a particular service are not clearly defined. The majority of the reports are limited to either a proposal format or limited to some functions within the framework of a particular agency. Vidaver (1969) stated that judging from the curriculum design, the MHT's have acquired with some rudimentary professional skills, such as, interviewing, consulting, and acting as liaisons between different agencies. McPheeters (1966) suggested that the MHT can function well in the area of working with individual patients, administration, research, etc. Stewart (1966) proposed that within the social service frame of reference, the MHT could accomplish tasks, such as, interviewing the patients and their families, and collecting background information. In a perhaps more psychologically oriented presentation, Wellner (1968) identified five particular functions of the MHT; interviewer, counseling-psychologist, expeditor, behavior engineer, and researcher (or research assistants).

#### Function

The present discussion is based upon my retrospective experience as the past Chairman of the Field Supervision Subcommittee of a MHT advisory Committee from one of the community colleges in the Baltimore area and the accumulated supervision impressions of a group of MHT trainees in the psychological

service of both a state hospital for the mentally retarded and a comprehensive pediatric clinic in the community setting. It should be pointed out that while some of the MHT's functions in the psychological services are exclusively psychologically oriented, some of their functions are commonly shared by other service disciplines, such as, psychiatry and social service.

1. Interview. The utilization of interviewing techniques is one area which the MHT can most effectively function. My experience is that the MHT does not necessarily have to conduct brief, and impressionistic interview, but, rather in depth interviews, such as identification of the intellectual functioning level, the language and communication ability, emotional development, and the understanding of the integrative patterns of a patient. At the initial stage, some guidelines are useful which is not essentially different from the on-job-training for a highly trained psychologist at the same phase of professional development.

2. Psychometric evaluation. The MHT can also successfully administer some selected standardized psychological tests and/or evaluation scales under minimal supervision. However, the interpretation and/or clinical differential diagnostic work needs to be done by a psychologist. The MHT's involvement in this particular function causes some professional ethic issues and concerns which will be discussed later.

3. Follow-up recommendations. Psychological services have

been frustrated for a long time by the lack of feedback regarding their specific recommendations made. The need for the modification such of recommendations usually presents itself at a case follow-up evaluation conference which generally is too late to profit the patient. The MHT can then effectively interpret the psychological recommendations to a reciprocal agency, follow the progress, and suggest that some of the recommendations be altered to the psychologist. This function of the MHT deserves special attention since at the time psychological recommendations are not practical, but, rarely are they brought to the attention of a clinician. As being such, with assistance from the MHT, such a defect perhaps can be eliminated.

4. Service consultant. An area rarely stressed is that the MHT can serve as an educational consultant and a representative from psychological services to other less academically oriented, semi-professional staff of an agency. At the practical level then, the MHT participate in various orientations and on-job-training programs. One of the possible advantages of using the MHT in this service capacity is that since they are less equipped with psychological jargon, they perhaps can more effectively communicate with the other disciplines.

5. Counseling and psychotherapy. It may be expected that the MHT will conduct counseling and/or psychotherapy in terms of short term treatment. In a mental retardation training center, their skill related to this particular function is conceivably

operative since in most instances, the counseling procedure usually is limited to a directive approach whereas "Insightful" or "non-directive" counseling generally is non-practical.

6. Behavior modification agent. One of the most important functions of the MHT's is their ability to serve as behavior modification agents. I feel that this task is more suitable for the MHT at an executive level, since behavior modification procedure generally is operationally defined, consequently, the MHT should be able to function more independently and less dependent on the intensive supervision of a psychologist. The particular tasks in this area can range from assisting in program planning, interpreting the outline of a behavior modification program to other disciplines, collecting data, and delivering rewards or punishment, etc.

7. Research. Another area which shows great potential, but has rarely been thoroughly explored is the MHT's function as a research assistant. I have explored the possibility for the MHT trainees to conduct some research activities, such as, collecting data, and data calculation, with some success. In general, this specific function of the MHT is not only largely dependent on the guidance of an experienced psychologist's knowledge, but his professional interests as well.

In survey related to the MHT's professional seven functions within the psychological service framework, I have found that administering psychological tests and conducting counseling sessions



were the two most preferred tasks, while functioning as a behavior agent stands second high on the preference list. The research activities appear to be the least attractive one. This survey was conducted with a group of two years MHT trainees. The results are understandably so, since psychological testing has been traditionally identified as one of the primary functions of a psychologist and at times it has been mysteriously glorified. A possible explanation of the less attractive research activity is that academically the MHT's are not oriented for such a task. For instance, in some of the two year MHT training programs, college mathematics is not even required.

#### Implications

The inferences of successful utilization of the MHT's in the psychological service are multitudinous, and can be summarized as follows:

1. It should free the psychologist of doctoral and/or masters level for more creative tasks. For instance, Wellner (1968) reported that superintendents of state mental hospitals throughout the country identified the testing role as being the major contribution of psychologists in such hospitals. The function of administering routine tests--a task usually resented by many doctoral psychologists, can be easily taken over by the MHT's. However, the successful performance of this function will depend partly on the modification of some present existing professional ethical codes. For instance, should MHT be involved in psychological tests at

all? This issue remains to be answered by the professional organization.

In this regard, Wellner (1968) summarized:

They (MHT) will be available to provide those direct services for which there are not enough trained people now. The professional will, meanwhile, be able to utilize that knowledge which is uniquely his, to further develop services, to develop improved methods of delivery of services, and to train technicians...

2. Another obvious advantage is that additional manpower available in the psychological service, and a lighter case load per person, better patient care in terms of both qualitative and quantitative can be resulted.

3. The utilization of the MHT in a psychological service frame of reference undoubtedly will elicit some existential anxiety among the psychologists who currently devote most of their time to performing the above tasks, and at similarly level as the MHT's. By the same token, the MHT will likely disrupt the traditional roles of these clinicians. I offer no practical solution in this regard, and feel that after all, some existential anxiety may not be totally unhealthy.

4. From the previous mentioned 7 functions of the MHT's, we can easily detect that their basic tasks are both routine and assistive in nature. The question raises, to what extent, would

this type of work continue to attract MHT's in a given position?

5. Another concern is that since the MHT's have a shorter academic training background, and since they generally depend rather intensively on the on-the-job training for the further development of their professional skills, it is quite possible that the MHT has narrower range of professional skills and practical experiences. These are defined by the training psychologist and the philosophical orientation of a particular psychological service. If this speculation is correct, then, the transferring potentials of a MHT from psychological service to another psychological service of a different agency would likely be more difficult.

6. Another issue that remains to be answered is the differential functions between those MHTs who have received four years of academic training and those who received two years of training. While no practical answer is available due to the newness of the program, I feel that the MHTs from the four year programs theoretically are more capable of independent works, especially in the area of research.

### Conclusion

In preclis then, I am convinced that through my years of association with a program training MHTs, that they are important assets for the psychological services in both fields of mental retardation and mental hygiene and, that they have the potential to play a dynamic role in the decade to come. However, I would like to say that a successful utilization of the MHTs in a particular service discipline is not only dependent on the continuous creation

of job classifications, but, a systematic analysis and investigation of the MHT's professional strength and weakness, and based on their actual job performance either at a state or national level.

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